



Math Olympiad and Problem Solving Programs
E130 - Honors Geometry Problem Solving
Problem Set 15.2 - SAT Review

Name:

Date:

1. B
2. E
3. 3
4. 77
5. E
6. C
7. E
8. A
9. The common mistake is in solving this problem is to assume that the 2×3 rectangles fit without rotating. This gives us $(6 \div 2) \times (5 \div 3) = 3$ rectangles. However, if we rotate the 2×3 rectangles into 3×2 rectangles, then we can fit $(6 \div 3) \times (5 \div 2) = 4$ rectangles. B
10. Since p is prime, p^4 has $4 + 1 = 5$ factors. Therefore, we want 10 factors. Since q is prime, q^9 has $9 + 1 = 10$ factors. E